

Appl. No. 10/509,136

Reply to Office Action of December 22, 2006

Amendment dated: May 22, 2007

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-3. (Cancelled)

4. (Currently Amended) An image display apparatus comprising:

an illumination optical system having a light source;

a plurality of spatial light modulation elements each having reflecting electrodes;

a polarization element corresponding to each of the plural spatial light modulation elements;

wherein the illumination light from the illumination optical system enters a condenser lens whose optical access is directed obliquely against the illumination light;

a color separation/composition element for color-separating illumination light from the illumination optical system into light for the respective spatial light modulation elements and for compositing reflection lights from the spatial light modulation elements, the color separation/composition element having reflection planes laid obliquely with respect to the illumination light;

a projection optical system for projecting composited light outgoing from the color separation/composition element to display an image of the respective spatial light modulation elements;

a first polarization change means for causing light of wavelength band which is supposed to pass through the reflection planes of the color separation/composition element to be of P-polarized light toward the reflection planes and causing light of wavelength band

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which is supposed to be reflected by the reflection planes of the color separation/composition element to be of S-polarized light toward the reflection planes, the first polarization change means being disposed in an optical path between the illumination optical system and the color separation/composition element; and

further comprising a retarder stack in the optical path between the illumination optical system and the color separation/composition element.

5. (Currently Amended) The image display apparatus according to claim 4, wherein the ~~second polarization change means is a retarder stack which, of the illumination light, rotates only a polarization direction of a certain light of wavelength band which is supposed to be blocked by the polarization element.~~
6. (Original) The image display apparatus according to claim 4, wherein transmission axes of the respective polarization elements are rotated against polarization directions of the illumination lights outgoing from the color separation/composition element to the respective polarization elements so as to adjust white balance of a display image.
7. (Currently Amended) An image display apparatus comprising:
an illumination optical system having a light source;
a plurality of spatial light modulation elements each having reflecting electrodes;
a polarization element corresponding to each of the plural spatial light modulation elements;
a color separation/composition element for color-separating illumination light from the illumination optical system into light for the respective spatial light modulation elements and for compositing reflection lights from the spatial light modulation elements, the color separation/composition element having reflection planes laid obliquely with respect to the

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illumination light, and wherein the color separation/composition element is comprised of a single rectangular body;

a projection optical system for projecting composited light outgoing from the color separation/composition element to display an image of the respective spatial light modulation elements;

a first polarization change means for causing light of wavelength band which is supposed to pass through the reflection planes of the color separation/composition element to be of P-polarized light toward the reflection planes and causing light of wavelength band which is supposed to be reflected by the reflection planes of the color separation/composition element to be of S-polarized light toward the reflection planes, the first polarization change means being disposed in an optical path between the illumination optical system and the color separation/composition element; and

further comprising a retarder stack in the optical path between the illumination optical system and the color separation/composition element.

8. (Currently Amended) The image display apparatus according to claim 7, wherein

~~the second polarization change means is a retarder stack selectively which, of the illumination light, rotates only a desired polarization direction of light of wavelength band which is supposed to be blocked by the polarization element.~~

9. (Previously Presented) The image display apparatus according to claim 7, wherein transmission axes of the respective polarization elements are rotated against polarization directions of the illumination lights outgoing from the color separation/composition element to the respective polarization elements so as to adjust white balance of a display image.

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Please add the following new claims:

10. (New) The image display apparatus of claim 4, wherein the color separation/composition element is a dichroic prism wherein one of the light modulating elements and a corresponding polarization element is located at each of at least three side walls of the dichroic prism.
11. (New) The image display apparatus of claim 7, wherein the color separation/composition element is a dichroic prism wherein one of the light modulating elements and a corresponding polarization element is located at each of at least three side walls of the dichroic prism.